

**NORTH CAROLINA DIVISION OF  
AIR QUALITY**

**Air Permit Review**

Permit Issue Date: **date, 2006**

**Region:** Winston-Salem Regional Office  
**County:** Rockingham  
**NC Facility ID:** 7900131  
**Inspector's Name:** Michael Gendy  
**Date of Last Inspection:** 08/25/2005  
**Compliance Code:** C/In Compliance With  
 Procedural Reqr

<b>Facility Data</b>			<b>Permit Applicability (this application only)</b>		
<b>Applicant (Facility's Name):</b> Transcontinental Gas Pipeline Corp  <b>Facility Address:</b> Transcontinental Gas Pipeline Corp 4300 NC 65 Reidsville, NC 27320  <b>SIC:</b> 4922 / Natural Gas Transmission <b>NAICS:</b> 48621 / Pipeline Transportation of Natural Gas  <b>Facility Classification: Before:</b> Title V <b>After:</b> Title V <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V			<b>SIP:</b> <b>NSPS:</b> <b>NESHAP:</b> <b>PSD:</b> <b>PSD Avoidance:</b> <b>NC Toxics:</b> <b>112(r):</b> <b>Other:</b>		
<b>Contact Data</b>			<b>Application Data</b>		
<b>Facility Contact</b>	<b>Authorized Contact</b>	<b>Technical Contact</b>	<b>Application Number:</b> 7900131.06A <b>Date Received:</b> 06/26/2006 <b>Application Type:</b> Renewal <b>Application Schedule:</b> TV-Renewal <b>Existing Permit Data</b> <b>Existing Permit Number:</b> 09113/T04 <b>Existing Permit Issue Date:</b> 11/30/2005 <b>Existing Permit Expiration Date:</b> 03/31/2007		
Ivory Tatum District Manager (336) 951-2251 4300 NC Highway 65 Reidsville NC, 27320	Randy Barnard Vice President of Operations (713) 215-2000 P O Box 1396 Houston TX, 77251-1396	Amanda Wickman Environmental Specialist (713) 215-2680 P O Box 1396 Houston TX, 77251-1396			
<b>Review Engineer:</b> Mark Cuilla  <b>Review Engineer's Signature:</b> <b>Date:</b>			<b>Comments / Recommendations:</b> <b>Issue</b> 09113/T05 <b>Permit Issue Date:</b> <b>date, 2006</b> <b>Permit Expiration Date:</b> <b>date, 2011</b>		

**I. Purpose of Application**

This permitting action is a renewal of an existing Title V permit pursuant to 2Q .0513. The existing Title V permit (**09113T04**) was issued on November 30, 2005, and is currently scheduled to expire on March 31, 2007. The renewal application was received on June 26, 2006, or at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

In addition to the renewal, the Permittee has requested that new insignificant activities be placed on the permit and the currently listed equipment be modified. These changes are described in detail in Section IV of this Document.

**II. Facility Description**

The facility is a natural gas pumping station. Existing permitted equipment includes sixteen primary and three auxiliary compression units and two internal combustion engines for air supply. The facility operates 24 hours per day, 7 days a week, and 52 weeks per year.

### III. History/Background/Application Chronology

**December 31, 2003** – Permit **09113T02** was issued as a 15A NCAC 2Q .0501(c)(2) modification to incorporate an alternative monitoring plan to satisfy the requirements of 15A NCAC 2D .1409. This permit was issued with a requirement that within 12 months of issuance the Permittee was to submit a complete title V application.

**November 1, 2005** – Permit **09113T03** was issued as a significant modification to satisfy the 12 month submittal requirements placed in an earlier permit revision.

**November 30, 2005** – Permit **09112T04** was issued as an administrative amendment to correct the annual compliance certification date from January 30 to March 1.

**June 26, 2006** – Permit application **7900131.06A** was received requesting renewal of the permit. This application was deemed complete for processing.

**July 13, 2006** – Received WSRO application review.

**August 3, 2006** – DRAFT permit sent to Permittee, Regional Office, and Title V Coordinator for comment prior to the public notice period.

**Date, 2006** – DRAFT sent to 30-day public notice and 45-day EPA review prior to issuance.

### IV. Permit Modifications/Changes and ESM Discussion

The following table describes the modifications to the current permit as part of the renewal process.

Page(s)	Section	Description of Change(s)
Attachment	Insignificant Activities	-added, deleted, and modified equipment as requested in the renewal application -added formerly unassociated source to list as noted by Regional Office
Cover	-	-amended all permit revision numbers and dates
All	Header	-amended permit revision number
3-4	Equipment table	-modified equipment descriptions to reflect MACT source types -modified firing type for ES-A/C1 and ES-A/C2 from “lean-fired” to “rich-fired” per Permittee
4	2.1 A (table)	-corrected equipment descriptions -added MACT Subpart title
5	2.1 B (table)	-corrected equipment descriptions -added MACT Subpart title
6	2.1 C (table)	-added MACT Subpart title
7	2.1 C.2 2.1 C.2.a	-modified rule citation -added NSPS Subpart title
8	2.2 A	-corrected equipment descriptions
9	2.2 B.1.a	-corrected equipment descriptions -removed table and modified emission limit to indicate correct current and future years’ yearly total limit
10	2.2 B.1.e 2.2 B.1.f	-edited table to remove unnecessary NOx limits (past years’ numbers) -updated shell language
-	2.2 C	-removed MACT requirement and placed specific “non-applicable” designations in Section 2.1 specific conditions
11-19	General Conditions	-updated shell language

The following table indicates the modifications to ESM as a result of this permit renewal:

<b>Current Description</b>	<b>Change resulting from permit renewal</b>
Engine oil tank (215 gallons capacity; <b>ID No. I-0002</b> )	Engine oil <i>day</i> tank (“B” Building) (215 gallons capacity; <b>ID No. I-0002</b> )
#12 hydraulic oil tank (329 gallons capacity; <b>ID No. I-0006</b> )	#12 hydraulic oil tank (47 gallons capacity; <b>ID No. I-0006</b> )
Engine crankcase vents ( <b>ID No. I-0053</b> )	Engine crankcase <i>and turbocharger</i> vents ( <b>ID No. I-0053</b> )
Oil sump #1 tank (478 gallons capacity; <b>ID No. I-0055</b> )	Oil sump #1 (Fill/Drain “A” Building) (478 gallons capacity; <b>ID No. I-0055</b> )
Oil sump #2 (300 gallons capacity; <b>ID No. I-0056</b> )	Oil sump #2 (Fill/Drain “A” Building) (300 gallons capacity; <b>ID No. I-0056</b> )
Lubricating oil tank (1,720 gallons capacity; <b>ID No. I-T-0001</b> )	Oil sump “B” Building (Fill/Drain) (1,720 gallons capacity; <b>ID No. I-T-0001</b> )
Ethylene glycol tank (6,900 gallons capacity; <b>ID No. I-T-0010</b> )	L.O.C.W./J.W. Transfer Tank #1 (6,900 gallons capacity; <b>ID No. I-T-0010</b> )
Ethylene glycol/water tank (13,513 gallons capacity; <b>ID No. I-T-0026</b> )	#1-10 M.U.J.W. Surge Tank (13,513 gallons capacity; <b>ID No. I-T-0026</b> )
Ethylene glycol/water tank (4,316 gallons capacity; <b>ID No. I-T-0053</b> )	Make-up/Ethylene glycol/water tank (4,316 gallons capacity; <b>ID No. I-T-0053</b> )
Ethylene glycol/water tank (2,075 gallons capacity; <b>ID No. I-T-0054</b> )	Antifreeze/Ethylene glycol/water tank (2,075 gallons capacity; <b>ID No. I-T-0054</b> )
Pipeline liquids/cond. Tank (5,500 gallons capacity; <b>ID No. I-T-0114</b> )	Natural Gas Condensate Tank (4,200 gallons capacity; <b>ID No. I-T-0014</b> )
Waste oil reclaim tank (70 gallons capacity; <b>ID No. I-0014</b> )	End-dated per Permittee
#14 pipeline liquids drop pot (20 gallons capacity; <b>ID No. I-0015</b> )	End-dated per Permittee
#14 pipeline liquids drop pot (20 gallons capacity; <b>ID No. I-0016</b> )	End-dated per Permittee
#15 pipeline liquids drop pot (20 gallons capacity; <b>ID No. I-0017</b> )	End-dated per Permittee
#15 pipeline liquids drop pot (20 gallons capacity; <b>ID No. I-0018</b> )	End-dated per Permittee
#14 pipeline liquids drop pot (16 gallons capacity; <b>ID No. I-0019</b> )	End-dated per Permittee
#15 pipeline liquids drop pot (16 gallons capacity; <b>ID No. I-0020</b> )	End-dated per Permittee
Antifreeze reclaim tank (110 gallons capacity; <b>ID No. I-0012</b> )	End-dated per Permittee
Methanol tank (1,604 gallons capacity; <b>ID No. I-T-0104</b> )	End-dated per Permittee
Pipeline liquids tank (2,600 gallons capacity; <b>ID No. I-T-0109</b> )	End-dated per Permittee
NA – New Source per Permittee	Used oil tank (3,133 gallons capacity; <b>ID No. I-T-0057</b> )
NA – New Source per Permittee	#1-10 M.U.L.O.C.W. Surge Tank (2,716 gallon capacity; <b>ID No. I-T-0058</b> )
NA – New Source per Permittee	#11 L.O.C.W. Surge Tank (407 gallons capacity; <b>ID No. I-T-0059</b> )
NA – New Source per Permittee	#12 L.O.C.W. Surge Tank (407 gallons capacity; <b>ID No. I-T-0060</b> )
NA – New Source per Permittee	#13 L.O.C.W. Surge Tank (407 gallons capacity; <b>ID No. I-T-0061</b> )

<b>Current Description</b>	<b>Change resulting from permit renewal</b>
NA – New Source per Permittee	#14 L.O.C.W Surge Tank (514 gallons capacity; <b>ID No. I-T-0062</b> )
NA – New Source per Permittee	#15 L.O.C.W Surge Tank (581 gallons capacity; <b>ID No. I-T-0063</b> )
NA – New Source per Permittee	#11-15 M/U L.O.C.W and JW Transfer Tank #2 (6,900 gallons capacity; <b>ID No. I-T-0064</b> )
NA – New Source per Permittee	Turbine Oil Tank (2,078 gallons capacity; <b>ID No. I-T-0065</b> )
NA – New Source per Permittee	Turbine Oil Day Tank (294 gallons capacity; <b>ID No. I-T-0066</b> )
NA – New Source per Permittee	Air Compressor Drain and Fill Tank (98 gallons capacity; <b>ID No. I-T-0067</b> )
NA – New Source per Permittee	Diesel Tank (500 gallons capacity; <b>ID No. I-T-0068</b> )
NA – New Source per Permittee	Used Oil Tank (From Oil Change Rack) (344 gallons capacity; <b>ID No. I-T-0069</b> )
NA – Former unassociated insignificant activity	Piping Component and Blowdown Fugitives ( <b>ID No. I-ES-FUGS</b> )
Seven two-cycle natural gas lean-fired internal combustion engines (each rated at 1,800 hp output and 14.9 million Btu per hour heat input; <b>ID Nos. ES-M/L1 through ES-M/L7</b> )	Seven two-stroke natural gas lean-fired internal combustion engines (each rated at 1,800 maximum brake horsepower output and 14.9 million Btu per hour heat input; <b>ID Nos. ES-M/L1 through ES-M/L7</b> )
Two two-cycle natural gas lean-fired internal combustion engines (each rated at 2,100 hp output and 14.7 million Btu per hour heat input; <b>ID Nos. ES-M/L8 and ES-M/L9</b> )	Two two-stroke natural gas lean-fired internal combustion engines (each rated at 2,100 maximum brake horsepower output and 14.7 million Btu per hour heat input; <b>ID Nos. ES-M/L8 and ES-M/L9</b> )
One two-cycle natural gas lean-fired internal combustion engine with high pressure fuel injection system (rated at 2,100 hp output and 14.7 million Btu per hour heat input; <b>ID No. ES-M/L10</b> )	One two-stroke natural gas lean-fired internal combustion engine with high pressure fuel injection system (rated at 2,100 maximum brake horsepower output and 14.7 million Btu per hour heat input; <b>ID No. ES-M/L10</b> )
Three two-cycle natural gas lean-fired internal combustion engines (each rated at 3,400 hp output and 23.3 million Btu per hour heat input; <b>ID No. ES-M/L11 through ES-M/L13</b> )	Three two-stroke natural gas lean-fired internal combustion engines (each rated at 3,400 maximum brake horsepower output and 23.3 million Btu per hour heat input; <b>ID No. ES-M/L11 through ES-M/L13</b> )
Two two-cycle natural gas lean-fired internal combustion engines (each rated at 5,500 hp output and 37.7 million Btu per hour heat input; <b>ID Nos. ES-M/L14 and ES-M/L15</b> )	Two two-stroke natural gas lean-fired internal combustion engines (each rated at 5,500 maximum brake horsepower output and 37.7 million Btu per hour heat input; <b>ID Nos. ES-M/L14 and ES-M/L15</b> )
Three four-cycle natural gas rich-fired internal combustion engines (each rated at 370 hp output and 2.89 million Btu per hour heat input; <b>ID Nos. ES-AUX1 through ES-AUX3</b> )	Three four-stroke natural gas rich-fired internal combustion engines (each rated at 370 maximum brake horsepower output and 2.89 million Btu per hour heat input; <b>ID Nos. ES-AUX1 through ES-AUX3</b> )
One four-cycle natural gas lean-fired internal combustion engine (rated at 211 hp output and 1.3 million Btu per hour heat input; <b>ID No. ES-A/C1</b> )	One four-stroke natural gas rich-fired internal combustion engine (rated at 211 maximum brake horsepower output and 1.3 million Btu per hour heat input; <b>ID No. ES-A/C1</b> )
One four-cycle natural gas lean-fired internal combustion engine (rated at 194 hp output and 1.5 million Btu per hour heat input; <b>ID No. ES-A/C2</b> )	One four-stroke natural gas rich-fired internal combustion engine (rated at 194 maximum brake horsepower output and 1.5 million Btu per hour heat input; <b>ID No. ES-A/C2</b> )
One natural gas-fired dry low NO <sub>x</sub> combustion turbine (rated at 15,000 hp output and 122 million Btu per hour heat input; <b>ID No. ES-M/L16</b> )	One natural gas-fired dry low NO <sub>x</sub> combustion turbine (rated at 15,000 maximum brake horsepower output and 122 million Btu per hour heat input; <b>ID No. ES-M/L16</b> )

## V. Regulatory Review

The facility is currently subject to the following regulations:

15A NCAC 2D .0516, Sulfur Dioxide Emissions from Combustion Sources  
15A NCAC 2D .0521, Control of Visible Emissions  
15A NCAC 2D .0524, New Source Performance Standards  
15A NCAC 2D .1111, Maximum Achievable Control Technology  
15A NCAC 2D .1409, Seasonal Emission Rate for Large Combustion Sources  
15A NCAC 2Q .0317, Avoidance Conditions (for 15A NCAC 2D .0530)

A regulatory review for these existing requirements will not be included in this document. No new regulations are necessary for this permit renewal.

## VI. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

**NSPS** – The facility’s natural gas-fired dry low NO<sub>x</sub> combustion turbine (**ID No. ES-M/L16**) is currently the only source at the facility subject to a new source performance standard. Specifically, it is subject to a NO<sub>x</sub> limitation of 203.4 parts per million at 15 percent oxygen on a dry basis, and to a sulfur dioxide limitation of 150 parts per million at 15 percent oxygen on a dry basis or fuel can not contain sulfur in excess of 0.8 percent by weight. These two limits are associated with 40 CFR 60, Standards of Performance for Stationary Gas Turbines (Subpart GG). The Permittee is required to comply with the following language. There are no required modifications as a result of this renewal.

### 2. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. *For the natural gas-fired combustion turbine (ID No. ES-M/L16), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 “New Source Performance Standards” (NSPS) as promulgated in 40 CFR 60, Subpart GG (Standards of Performance for Stationary Gas Turbines), including Subpart A “General Provisions.”*
- b. *The owner or operator shall not cause to be discharged into the atmosphere from the stationary gas turbine (ID No. ES-M/L16), any gases which contain nitrogen oxides in excess of 203.4 ppm at 15 percent oxygen on a dry basis as determined from the following equation. [40 CFR 60.332]*

$$TD = 0.0150 \times 14.4/Y + F$$

*Where: TD = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen and on a dry basis), Y = manufacturer’s rated heat rate at manufacturer’s rated load (10.62 kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and*

*F = NO<sub>x</sub> emission allowance for fuel-bound nitrogen. [40 CFR 60.332(a)(2)]*

- c. *The owner or operator shall not cause to be discharged into the atmosphere from the stationary gas turbine (ID No. ES-M/L16), any gases which contain sulfur dioxide in excess of 150 ppm at 15 percent oxygen on a dry basis [40 CFR 60.333(a)]; or burn any fuel which contains sulfur in excess of 0.8 percent by weight [40 CFR 60.333(b)].*

**Monitoring** [40 CFR 60.334]

- d. *The Permittee shall determine and record the sulfur content of the fuel being fired in the turbine (ID No. ES-M/L16) in accordance with the DAQ approved custom fuel monitoring plan.*

**Test Methods** [40 CFR 60.335]

- e. *In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A.*

f. The Permittee shall determine compliance with the nitrogen oxides and sulfur dioxide standards as follows:

i. The nitrogen oxides emission rate ( $NO_x$ ) shall be computed for each run using the following equation:

$$NO_x = (NO_{x0})(Pr/Po)0.5e^{19(Ho-0.00633)}(288^{\circ}K/T_a)^{1.53}$$

Where:

$NO_x$  = emission rate of  $NO_x$  at 15 percent  $O_2$  and ISO standard ambient conditions, ppm by volume.

$NO_{x0}$  = observed  $NO_x$  concentration, ppm by volume at 15 percent  $O_2$ .

$Pr$  = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

$Po$  = observed combustor inlet absolute pressure at test, mm Hg.

$Ho$  = observed humidity of ambient air, g  $H_2O/g$  air.

$e$  = transcendental constant, 2.718

$T_a$  = ambient temperature,  $^{\circ}K$

ii. The turbine (**ID No. ES-M/L16**) shall be tested for compliance with 2.1 C.2.b at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

iii. Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The  $NO_x$  emissions shall be determined at each of the load conditions specified in paragraphs 2.1 C.2.f.ii.

g. The owner or operator shall determine compliance with the sulfur content standard in 2.1 C.2.c in accordance with the DAQ approved custom fuel monitoring plan.

h. Instead of using the equation in 2.1 C.2.f.i, manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in 40 CFR 60.8 to ISO standard day conditions. These factors are developed for each gas turbine model they manufacture in terms of combustion inlet pressure, ambient air pressure, ambient air humidity, and ambient air temperature. They shall be substantiated with data and must be approved for use by the Administrator of the US EPA before the initial performance test required by 40 CFR 60.8. Notices of approval of custom ambient condition correction factors will be published in the Federal Register.

**NESHAPS/MACT** – For the significant modification to this permit (November 1, 2005 – 09113T03), the facility was evaluated for MACT applicability and respective conditions were placed in the permit as needed. At that time the facility was evaluated for applicability of Subparts YYYY, ZZZZ, and DDDDD. This permit renewal will add a discussion for Subpart HHH.

1. 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines (Subpart YYYY). This Subpart applies to all existing, new, or reconstructed stationary combustion turbines [40CFR63.6085]. The facility currently operates one natural gas-fired dry low  $NO_x$  combustion turbine (rated at 15,000 hp output and 122 million Btu per hour heat input; **ID No. ES-M/L16**). While subject to this Subpart, the turbine has no requirements. 40CFR63.6090(b)(4) states that “all existing stationary combustion turbines in all subcategories do not have to meet the requirements of this Subpart and of Subpart A.” This is noted in Section 2.1 C of the permit. No modifications are needed as a result of this renewal.

2. 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (Subpart ZZZZ). The applicability of this Subpart applies to all existing and new internal combustion engines with a site-rating of more than 500 brake horsepower located at a major source of HAP emissions [40CFR63.6590]. The facility currently has:

-seven two-stroke natural gas lean-fired internal combustion engines (each rated at 1,800 maximum brake horsepower output and 14.9 million Btu per hour heat input; **ID Nos. ES-M/L1 through ES-M/L7**);

- two two-stroke natural gas lean-fired internal combustion engines (each rated at 2,100 maximum brake horsepower output and 14.7 million Btu per hour heat input; **ID Nos. ES-M/L8 and ES-M/L9**);
- one two-stroke natural gas lean-fired internal combustion engine with high pressure fuel injection system (rated at 2,100 maximum brake horsepower output and 14.7 million Btu per hour heat input; **ID No. ES-M/L10**);
- three two-stroke natural gas lean-fired internal combustion engines (each rated at 3,400 maximum brake horsepower output and 23.3 million Btu per hour heat input; **ID Nos. ES-M/L11 through ES-M/L13**);
- two two-stroke natural gas lean-fired internal combustion engines (each rated at 5,500 maximum brake horsepower output and 37.7 million Btu per hour heat input; **ID Nos. ES-M/L14 and ES-M/L15**);
- three four-stroke natural gas rich-fired internal combustion engines (each rated at 370 maximum brake horsepower output and 2.89 million Btu per hour heat input; **ID Nos. ES-AUX1 through ES-AUX3**);
- one four-stroke natural gas rich-fired internal combustion engine (rated at 211 maximum brake horsepower output and 1.3 million Btu per hour heat input; **ID No. ES-A/C1**); and
- one four-stroke natural gas rich-fired internal combustion engine (rated at 194 maximum brake horsepower output and 1.5 million Btu per hour heat input; **ID No. ES-A/C2**).

Per 40CFR63.6590(b)(3), the following types of combustion engines do not have to meet the requirements of this Subpart and of Subpart A of this part. In addition, no initial notification is necessary. A stationary combustion engine that is:

- an existing spark ignition two-stroke lean burn stationary RICE,
- an existing spark ignition four-stroke lean burn stationary RICE,
- an existing compression ignition stationary RICE,
- an existing emergency stationary RICE,
- an existing limited use stationary RICE, or
- an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

All engines meet this exemption. Therefore, they are subject to the MACT but have no requirements. This has been noted in the renewed permit.

3. 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, Institutional Boilers and Process Heaters (Subpart DDDDD). For the November 1, 2005 permit revision, the facility was evaluated for applicability of this Subpart. In my review for that permit I stated that “the applicability of this Subpart applies to all existing and new industrial, commercial, and institutional boilers and process heaters. The requirements of this Subpart are based on a combination of boiler attributes (e.g., size, type, and fuel type). The facility has one subject boiler (**ID No. IES-BLR2**). This existing, natural gas-fired, small boiler falls into Population I category of sources with no requirements. The permit notes that this boiler is subject to the Subpart but has no applicable requirements per 40CFR 63.7506(c).” I accomplished this by adding an asterisk to the boiler in the list of insignificant sources. However, as part of this review I am modifying this designation. It is DAQ policy that an insignificant source that has no requirements within a specific rule (e.g., boiler MACT) is not subject to the MACT. Therefore, the asterisked language will be removed from the permit as part of this renewal.

4. 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Natural Gas Transmission and Storage (Subpart HHH). This Subpart applies to facilities that process, upgrade, transport or store natural gas prior to delivery to a local distribution company (LDC) or a final end user if no LDC is present. The final standards for natural gas transmission and storage facilities require that the owner or operator of a major source of HAP reduce HAP emissions from glycol dehydration units through the application of air emission control equipment or pollution prevention measures, or a combination of both. 40CFR63.1270(b) states that the affected source is each glycol dehydration unit. 40CFR63.1270(c) states that the owner or operator of a facility that does not contain an affected source, as specified in paragraph (b) of this Section, is not subject to the requirements of this Subpart. Transco Station 160 does not contain any glycol dehydration units and therefore, the requirements of this Subpart are not applicable. No modifications are needed as a result of this renewal.

**PSD** – The facility currently has two sources subject to PSD avoidance condition: (1) one two-cycle natural gas lean-fired internal combustion engine (**ID No. ES-M/L10**); and (2) one natural gas-fired dry low NOx combustion turbine (**ID No. ES-M/L16**). Specifically, they are subject to NOx limitations of “shall achieve a 6.5 pounds per hour reduction through combustion modification prior to operation of **ES-M/L16**”, and “shall not emit more than 37.5 pounds per hour thereafter for **ES-M/L10** and shall not emit more than 15 pounds per hour and 66 tons per year for **ES-M/L16**”. The Permittee is required to comply with the following language. There are no required modifications as a result of this renewal.

**I. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS  
for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

*To comply with this permit and avoid applicability of 15A NCAC 2D .0530 “Prevention of Significant Deterioration,” as requested by the Permittee, nitrogen oxides emissions from the natural gas-fired combustion turbine (**ID No. ES-M/L16**) shall be less than 66 tons per consecutive 12-month period, and a 6.5 pounds per hour nitrogen oxides emissions decrease at the natural gas-fired internal combustion engine (**ID No. ES-M/L10**) shall be demonstrated prior to the operation of the combustion turbine (**ID No. ES-M/L16**).*

**Emissions Limitation**

- a. *The natural gas-fired combustion turbine (**ID No. ES-M/L16**) shall not emit more than 15 pounds per hour of nitrogen oxides emissions.*
- b. *The natural gas-fired internal combustion engine (**ID No. ES-M/L10**) shall not emit more than 37.5 pounds per hour of nitrogen oxides emissions.*

**Testing Requirements**

- c.
  - i. *The Permittee shall demonstrate compliance with the nitrogen oxides emission limits by testing the combustion turbine (**ID No. ES-M/L16**) at 30, 50, 75, and 100 percent of the peak load or at four points in the normal operating range including the minimum point in the range and peak load. Testing shall use EPA reference method 20, as in effect on the date of permit issuance, contained in 40 CFR 60, Appendix A, OR in accordance with a testing protocol approved by the Division of Air Quality.*
  - ii. *TESTING PROTOCOL – At least 45 days prior to performing any required emissions testing, the Permittee must submit a testing protocol to the Regional Supervisor, DAQ for review and approval. All testing protocols must be approved by the DAQ prior to performing such tests.*
  - iii. *TESTING NOTIFICATION REQUIREMENT – To afford the Regional Supervisor, DAQ, the opportunity to have an observer present, the Permittee shall PROVIDE the Regional Office, in WRITING, at least 30 days notice of any required performance test(s).*

**112(r)** – The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule. This permit renewal does not affect this status.

**CAM** – 40 CFR 64 requires that a continuous assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold, and use a control device to meet an applicable standard. The facility’s equipment does not meet the criteria for CAM applicability because it is all uncontrolled. Therefore; the renewed permit will not include CAM language.

**VII. Facility Wide Air Toxics**

The facility is not currently subject to NC Air Toxics as never triggering a toxics review. This permit renewal does not affect this status.

**VIII. Facility Emissions Review**

There is no change in emissions for this renewal.

The following table represents the latest years emission inventory from the facility:

<b>Pollutant(s)</b>	<b>2005 Actual Emissions (tpy)</b>
CO	593.47
NO <sub>x</sub>	1,613.43
PM <sub>10</sub>	35.22
SO <sub>2</sub>	0.62
VOC	174.96
Total HAP/TAP	106.41

**IX. Stipulation Review**

There are no noted stipulation modifications necessary at this time.

**X. Public Notice/EPA and Affected State(s) Review**

Pursuant to 15A NCAC 2Q .0521, a notice of the DRAFT Title V Permit shall be placed in a newspaper of general circulation in the area where the facility is located. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 2Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 2Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above. The Mecklenburg and Forsyth County Local Programs are affected local programs and Virginia is an affected State within 50 miles of this facility.

**XI. Conclusions, Comments, and Recommendations**

A professional engineer's seal was not required for this renewal.

A consistency determination was not required for his renewal.

WSRO recommends issuance of the permit and was presented with a DRAFT permit prior to notice and issuance.

RCO concurs with WSRO's recommendation to issue the renewed air permit.